

MOTEC M4 SYSTEM

Firing Order 1-4-2-5-3-6

PIN	DESCRIPTION	COLOR	TO	COLOR	DESCRIPTION	CHECK
Motec M4 Connector						
1	Battery Positive	Red	>	Red	ECM & Injectors Power	
2	Injector 1	Green/Yellow	>	Tan	Injector 1	
			>	Tan/Black	Injector 5	
3	Injector 2	Green/Orange	>	Blue/Brown	Injector 4	
			>	Brown/Yellow	Injector 3	
4	5 Volt	Orange	>	Orange	MAP 5v	
		Brown/White	>	Brown/White	TPS 5v	
5	REF Hall	empty	>			
6	REF Mag	Pink/Grey	>	Blue-Shielded	Crank PS +	
7	Sync Hall	empty	>			
8	Sync Mag	empty	>			
9	PC Data Connector-6	empty	>			
10	PC Data Connector-8&9	empty	>			
11	PC Data Connector-5	empty	>			
12	PC Data Connector-7	empty	>			
13	Aux 1 (4 amp max)	plugged	>			
14	Injector 3	Green/Red	>	White	Injector 2	
			>	Green/Orange	Injector 6	
15	Injector 4	empty	>			
16	Throttle Position Sensor	Grey/White	>	Grey/White	TPS signal	
17	Manifold Pressure Sensor	Yellow	>	Yellow	MAP signal	
18	Aux Volt	plugged	>			
19	Dig Input 1	plugged	>			
20	Dig Input 2	plugged	>			
21	PC Data Connector-2	Black/White	>	Black/White	D9 female	

22	PC Data Connector-3	Orange/White	>	Orange/White	D9 female
23	PC Data Connector-4	Red/White	>	Red/White	D9 female
24	PC Data Connector-1	plugged	>		
25	Ground	Black	>	Black	Ignition Module Pin 4
		Black/White	>	Black/White	Firewall Pin A Main Grnd
26	8V (part of trigger)	plugged	>		
27	0V	Black	>	Pink/Grey	TPS & Eng Temp OV
	cut CAM PS		>	Black	MAP OV
	Check Crank 0 Volt Wire		>	Black	Air Temp OV
			>	Black	Capped
28	Engine Temp (water)	Green/Red	>	Green/Red	Engine Temp Signal
29	Air Temp Sensor	Grey	>	Grey	Air Temp Signal
30	Aux Temp	plugged	>		
31	Lambda Sensor +	plugged	>		
32	Lambda Sensor -	plugged	>		
33	Ignition 1	Blue/Yellow	>	Blue/Red	Ignition Module Pin 7
34	Ignition 2	Blue/Red	>	Blue/Orange	Ign Mod Pin 5: 0.6 amp max
35	Ignition 3	Blue/Orange	>	Blue/Yellow	Ign Mod Pin 2: 0.6 amp max
36	Ignition 4 or Aux 4	Purple/Black	>	Tan	Pin G (tach)
Firewall Connector					
A	Ground	Black/White	>	Black/White	Pin 27 (ground)
B	Ground	Black/White	>	Black	Ignition Module Pin 4
C	Warning Oil Pressure Light	White	>	White	Oil Press Light Sensor
D	Oil Pressure	Green	>	Green	Oil Pressure Sender
E	Alternator Light	Blue	>	Blue	Alternator
F	Water Temp Light	Red/Black	>	Red/White	Water Temp Sensor
G	Tach	Tan/Yellow	>	Purple/Black	Pin 36 (Ign 4 or Aux 4)
H	ECM Power	Yellow	>	Red	Pin 1(Injector Pwr Bundle)
J	Coil Power	Red	>	Red/Green	Coil Pack Connector

K	Starter Cut	Purple	>	
L	OBD2 Cut	Tan/Orange	>	
M	OBD2 Cut	Pink/Blue	>	
N	OBD2 Cut	Violet	>	
P	Ground OBD	empty	>	
R	12 Volt OBD	empty	>	
S	O2 Sensor 12V+	empty	>	
Crankshaft Position Sensor Ford 4.0L SOHC REF Sensor				
	Crankshaft PS Signal Shielded	Blue	>	Pink/Grey REF Mag Signal
	Crankshaft Ground Shielded	Pink/Grey	>	Black 0V Pin 27
Camshaft Position Sensor Ford 4.0L SOHC SYNC Sensor (<i>not used</i>)				
	CamShat PS Signal	Blue/Orange	>	Blue/Orange unconnected pin (sync mag)
	CPS Ground- cut	Grey/Pink	>	Black 0V Pin 27
Coil Pack Connector Ford EDIS6				
	Coil 12 Volt Power	Red/Green	>	Red Coil Power firewall pin J
	COIL 3 (2,6)	Tan/White	>	Tan/White Bosch IGN Module Pin 1
	COIL 2 (4,3)	Green/White	>	Green/White Bosch IGN Module Pin 3
	COIL 1 (1,5)	Orange/White	>	Orange/White Bosch IGN Module Pin 6
Throttle Position Sensor LS throttle body				
	TPS 5 Volt	Brown/White	>	Brown/White 5 v Pin 4
	TPS Signal	Grey/White	>	Grey/White TPS Pin 16
	TPS 0V	Pink/Grey	>	Black OV Pin 27
Ignition Module Ignitor 3 Channel 7 Pin				
1	Coil 3 Pin	Tan/White	>	Tan/White Coil 3 (2,6)
2	Ignition 3 (2,6)	Blue/Yellow	>	Blue/Orange Ignition 3 Pin 35
3	Coil 2 Pin	Green/White	>	Green/White Coil 2 (4,3)
4	Ground	Black	>	Black/White Ground Pin B Firewall
5	Ignition 2 (4,3)	Blue/Orange	>	Blue/Red Ignition 2 Pin 34
6	Coil 1 Pin	Orange/White	>	Orange/White Coil 1 (1,5)

7	Ignition 1 (1,5)	Blue/Red	> Blue/Yellow	Ignition 1 Pin 33
Manifold Absolute Pressure 1 Bar 100kpa				
	MAP 5 volt	Orange	> Orange	5 Volt Pin 4
	MAP Signal	Yellow	> Yellow	MAP Pin 17
	Map 0 Volt	Black	> Black	0 Volt Pin 27
Air Temp Sensor Delco 3/8NPT <i>calibration# 54001 (2 deg-cel)</i>				
	Air Temp Signal	Grey	> Grey	AT Pin 29
	Air Temp 0 Volt	Black	> Black	0 Volt Pin 27
Engine/Water Temp Sensor Bosch M12 <i>calibration 0 280 130 023 (1 deg-cel)</i>				
	Engine Temp Signal	Green/Red	> Green/Red	ET Pin 28
	Engine Temp 0 Volt	Pink/Grey	> Black	0 Volt Pin 27

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